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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,544	01/16/2004	Sami Kekki	60279.00080	5581
32294 7590 07/16/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER SAMUEL, DEWANDA A	
			ART UNIT	PAPER NUMBER
			2616	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/758,544

Applicant(s)

KEKKI, SAMI

Examiner

DeWanda Samuel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>16 January 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Willars et al. (US Patent 7,072,329).

With regard to claim 1, Willars et al. discloses having a *method for controlling an inter-working function linked with an ATM transport network*, Willars et al. discloses having a interworking function or interworking gateway represented by interworking gateway 50A ("inter-function")...transport layer interworking gateway 50 providing connection to a ATM transport bearer (column 10n line 29-38).

characterised in that said inter-working function uses a user defined information element of an existing protocol, that is used for establishing the data transport bearers, to adapt a new protocol for controlling the transport bearers in the Transport NetWork

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Layer. Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)...transport bearer initiating procedure which utilizing the interworking with q.aal2 signaling (column 10 46-49)...uses a binding identification such as served user generated reference ("user defined information element") used in IP -ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53).

With regard to claim 2, Willars et al. teaches the method recited in claim 1. *characterised in that transport related information is conveyed in said user defined information element.* Willars et al. discloses having a binding identification such as served user generated reference ("user defined information element") used in initiating response message (column 10 line 60-67 and column 11 line 1-3).

With regard to claim 3, Willars et al. teaches the method recited in claim 2. *characterised in that said transport related information includes at least one of the following information: transport network layer address information, transport network layer resource information, Transmission Time Interval of the transport network layer user, packet size information and Quality of Service information.* Willars et al. discloses having a interworking with q.aal2 signaling: option of using an IP specific protocol over the IP network (column 13 line 5-7)...also having a establish request message 4A-3 on the transport layer to the interworking gateway 50...the establish request message 4A-3

includes the E.164 address of the endpoint node...the ALC[AAL type 2 link characteristics (column 13 line 54-65).

With regard to claim 4, Willars et al. teaches the method recited in claim 1.
characterised in that said ATM transport network is used in Radio Access Network; and that said existing protocol is ALCAP protocol based on AAL2 Signaling.
Willars discloses having in fig. 3A a ATM network ("ATM transport network") used in a radio access network...with q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28) ...which is a ALCAP protocol (column 4 line 51).

With regard to claim 5, Willars et al. teaches the method recited in claim 4.
characterised in that said AAL2 signalling is based on ITU Recommendation Q.2630. Willars et discloses having q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28).

With regard to claim 6, Willars et al. teaches the method recited in claim 5.
characterised in that as said user defined information element of an existing ALCAP protocol is utilized a Served User Transport (SUT) Element of said Q.2630 signaling. Willars et al. discloses having a served user generated reference (SUGR "information element") ...SUGR used in IP-ALCAP protocol of the Q.2630.1 signaling (column 11 line 46-51).

With regard to claim 7, Willars et al. teaches the method recited in claim 1.

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characterised in that using said user defined information element in said new protocol for conveying information needed by said existing ALCAP protocol. Willars et al. discloses having a served user generated reference (SUGR "information element") ... SUGR used in IP-ALCAP protocol (column 11 line 46-53).

With regard to claim 8, Willars et al. teaches the method recited in claim 1.

characterised in that including said user defined information element in the Establish Confirm message of said existing ALCAP protocol. Willars et al. discloses having SUGR ("information element") within a q.aa2 establish establish confirmation message (column 12 line 40-42).

With regard to claim 9, Willars et al. teaches the method recited in claim 1.

characterised in that including said user defined information element in the Establish Request message of said existing ALCAP protocol. Willars et al. discloses SUGR ("information element") within an q.aa2 establish request message 3B-4 which is initiating a connection (column 12 line 32-35).

With regard to claim 10, Willars et al. teaches the method recited in claim 2.

characterised in that when receiving an address information of an Radio Access Network node, the check is made whether said address information is compatible with an address space of receiving protocol, and if said address information is not compatible, the address of said inter-working function is determined. Willars et al.

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discloses having receiving a initiation response message with the address for a node 3B-N ("radio access node", e.g. an E.164 address)...node 3B-26 queries database 54 to translate the E.164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 11, Willars et al. teaches the method recited in claim 10. *characterised in that the address of said inter-working function is determined by default for each network node.* Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)...in order for a node to reach another node on the IP network it must be transmitted to the appropriate interworking gateway 50... node 3B-26 queries database 54 to translate the E.164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 12, Willars et al. teaches the method recited in claim 10. *characterised in that the address of said inter-working function is queried from a centralized location in said network.* Willars et al. discloses having a node 3B-26 queries database 54 to translate the E.164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

With regard to claim 13, Willars et al. teaches the method recited in claim 10.

characterised in that the address of said inter-working function is determined based on a physical port from which Application Protocol message was received.

Willars et al. discloses the IP bearer signaling message 3B-3 includes the connection information for the interworking gateway 50...the connection indicator ([IP address, endpoint identifier such as UDP port number], column 12 43-47).

With regard to claim 14 Willars et al. teaches the method recited in claim 10.

characterised in that the address of said inter-working function is determined based on a logical port from which Application Protocol message was received. Willars et al. discloses the IP bearer signaling message 3B-3 includes the connection information for the interworking gateway 50...the connection indicator ([IP address, endpoint identifier such as UDP port number], column 12 43-47). It is known in the art the IP address and the UDP port number is called a socket which is a logical port.

With regard to claim 15 Willars et al. teaches the method recited in claim 10.

characterised in that said check is made using a type of address information field that indicates at least one of the following set including, the type of a network node, a type of address and a type of Transport Layer. Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)...the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and

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column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E.164 address ("type of address"), address before further processing is initiated.

With regard to claim 16, Willars et al. teaches the method recited in claim 10. *characterised in that said check is made using a type of node information field that indicates at least one of the following set including, the type of a network node, a type of address and a type of Transport Layer.* Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)...the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E.164 address ("type of address"), address before further processing is initiated.

With regard to claim 17 Willars et al. teaches the method recited in claim 7: *characterised in that said check is made using a type of transport layer information field that indicates at least one of the following set including, the type of a network node, a type of address and a type of Transport Layer.* Willars et al. discloses having a process for interworking with Q.aal2 signaling: option using an IP specific signaling protocol over the IP network (column 13 line 5-8)...the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address

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("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E.164 address ("type of address"), address before further processing is initiated.

With regard to claim 18, Willars et al. teaches the method recited in claim 1.

C h a r a c t e r i s e d in that mapping between the first interface of said existing protocol and the second interface of said new protocol is made in said inter-working function based on information in said user defined element. Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38)...in fig. 4A the interworking gateway 50 queries the database 52 in order to translate the AAL2 network address, e.g., the E.164 address ("type of address"), to an IP address of the endpoint (column 13 line 66-67 and column 14 line 1-10). It is inferred the interworking gateway 50 check the AAL2 network address, e.g., the E.164 address ("type of address"), address before further processing is initiated.

With regard to claim 19, Willars et al. teaches the method recited in claim 1.

c h a r a c t e r i s e d in that said inter-working function is implemented as a stand-alone node in said ATM transport network. Willars discloses having a Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in

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the ATM network (fig. 3B).

With regard to claim 20, Willars et al. teaches the method recited in claim 1. *characteris ed in that said inter-working function is implemented as a stand-alone node in a transport network.* Willars discloses having a Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in the ATM network (fig. 3B).

With regard to claim 21, Willars et al. teaches the method recited in claim 1. *char acteris e d in that said inter-working function is implemented as a part of a network node in said ATM transport network.* Willars discloses having a Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in the ATM network (fig. 3B).

With regard to claim 22, Willars et al. teaches the method recited in claim 1. *c h a r a c t e r i s e d in that said inter-working function is implemented as a part of a network node in a transport network.* Willars discloses having a Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-function", column 10 line 29-38) which is a stand-alone device in

the ATM network (fig. 3B).

With regard to claim 23, Willars et al. teaches the method recited in claim 22 *characterised in that said transport network is based on IP network*. Willars et al. discloses having a transport network that uses IP specific signaling protocol over the IP network (column 6 line 9-13 and column 13 line 5-67).

With regard to claim 24, Willars et al. discloses having a system for controlling an inter-working function linked with an ATM transport network, *characterised in that said inter-working function comprises a mapping entity that is arranged to use a user defined information element of an existing protocol, that is used for establishing the data transport bearers, to adapt a new protocol for controlling the transport bearers in the Transport Network Layer*. Willars et al. discloses having a...interworking function or interworking gateway represented by interworking gateway 50A ("inter-working function", column 10 line 29-38) link with a ATM transport network (fig. 3B). Willars et al. further transport bearer initiating procedure which utilizing the interworking with q.all2 signaling (column 10 46-49)...uses a binding identification such as served user generated reference ("user defined information element")used in IP -ALCAP protocol establishing a transport bearer in the transport network (column 11 line 1-53).

With regard to claim 25, Willars et al. teaches the method recited in claim 24.

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characterised in that said ATM transport network is used in Radio Access Network; and that said existing protocol is ALCAP protocol based on AAL2 Signalling.

Willars discloses having in fig. 3A a ATM network ("ATM transport network") used in a radio access network...with q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28) ...which is a ALCAP protocol (column 4 line 51).

With regard to claim 26, Willars et al. teaches the method recited in claim 24.

characterised in that said AAL2 signalling is based on ITU Recommendation Q.2630. Willars et discloses having q.aal2 signaling which synonymous with Q.2630.1 (column 11 line 26-28).

With regard to claim 27, Willars et al. teaches the method recited in claim 24.

characterised in that as said user defined information element of an existing protocol is utilized a Served User Transport (SUT) Element of said Q.2630 signaling.

Willars et al. discloses having a served user generated reference (SUGR "information element") ... SUGR used in IP-ALCAP protocol of the Q.2630.1 signaling (column 11 line 46-51).

With regard to claim 28, Willars et al. teaches the method recited in claim 24.

characterised in that the system further comprises a checking entity for making a check whether an address information is compatible with an address space of receiving protocol, when receiving an address information of an Radio Access Network node; and

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an address determining entity for determining the address of the said inter-working function. Willars et al. discloses having receiving a initiation response message with the address for a node 3B-N (" radio access node", e.g. an E.164 address)...node 3B-26 queries database 54 to translate the E.164 address received for node 3B-N to the IP address of the appropriate interworking gateway 50 (column 12 line 14-24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DeWanda Samuel whose telephone number is (571) 270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DeWanda Samuel
7/11/2007


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER